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Passed March 19th
1825

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Inaugural dissertation

On Calomel

By

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Georgia

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1871

In the present improved state of medical science, the student unacquainted with the practical part of his profession, (that is without some experimental knowledge) will often find, himself at a loss, when he is called upon to produce a dissertation, on some one particular medicine or disease, and he will be compelled to resort to the writings or experience of others to confirm his theoretical observations. I am aware that I have selected as a subject, a medicine upon which much has been said, both in its praise and with an intention, to prejudice the mind of the profession, and the world at large against it; but having seen some of its beneficial ^{effects} in the cure of disease, I can not refrain from speaking in its praise, in the highest terms. It is unnecessary for me at present to enter into an elaborate description of Mercury or

of its various preparations suffice it to say it
has been used in some one of its forms, for a
great length of time I shall only attempt
to give some account of Calomel, that is
of its chemical properties, or its component
parts according to the latest improvement
in Chemical Science and of its application
to the cure of some of the diseases to which
man is liable. According to the new doctrine
of Dry Calomel consists of one proportional
part of Chlorine, and one proportional part
of the Metal, and should therefore be denom-
inated, a Chloride or a protochloride, of Mercury,
which is the title most generally given to it.
But should the present doctrine of Chlorine
ever be exploded, we shall again be compelled
to change the term chloride for some other.
Would it not be preferable in the present
case, to use the term calomel, by which the

article is generally known, until we arrive
at a more definite conclusion, as to its com-
position? As there are several methods of pro-
curing Calomel, from the metal, I shall not
undertake to describe them here, but shall pro-
ceed to the examination of some of its sensible
qualities. When procured pure it exhibits a semi-
transparent mass, consisting of short prismatic
crystals, terminated by pyramids. Calomel
is inodorous, insipid, and of an ivory colour.
It becomes darkened by exposure to light, and
is nearly insoluble in water. The alkalis and
lime water decompose it and turn it black.
Serp and the sulphurets of antimony and
potash, decompose it, also iron [&] cad and copper.
Hence we discover the impropriety, of using
metallic mortars, in preparing prescriptions
into which this medicine enters.
Respecting the *modus operandi* of this remedy

there is and has been for many years considerable disputation. When he finds such conflicting opinions, as in the present case, the candid, enquirer after truth is often placed in a situation in which he is fearful, of moving but by so doing he should fall into error. He reads one author, who declares to him that he has instituted a series of experiments and that the result of those experiments, has forced the conclusion on his mind, that the doctrines of the Humoral Pathology are founded on truth and never can be shaken. Not satisfied here he is still anxious to give the subject a more thorough investigation. He accordingly consults another author, who declares to him that this doctrine is erroneous and that no article whatever is taken into the circulation unspiculated, or that all articles are changed into the nature of chyle before they can be received into the circulation.

without producing delicious consequences or even death. Their authors are both men of eminence in their professions and men whose veracity he dare not call in question. The one tells him that calomel operates and produces its therapeutic effects on the system, by being taken into the circulation and carried to the different parts of the body; the other affirms that it makes a purgative impression on the stomach, and that the impression is conveyed by sympathy through out the different parts of the body. He is now left to decide for himself, on this point, from the arguments adduced by the contending parties. Here he is too apt to give way to prejudice or follow the opinions of his instructor.

While all this disputation is carried on respecting the manner in which, this remedy produces its effects on living matter, we find it affects not its real practical utility. For it matters not, with the prac-



heat, physician, whether it is taken into the
circulation, or makes its primary impression
on the stomach, and by sympathy affects the
other parts of the body; The result he sees, its utility
he has experienced, and its general applicability
to the cure of very many diseases, he knows how
to appreciate. Some think the truly scientific
physician not only wishes to know that cer-
tain remedies will produce certain effects when
administered under certain circumstances, but he
is anxious to know the manner in which
these remedies act, in order to produce those
effects. The great variety of diseases to the
cure of which this remedy has been applied
will make it impracticable for me to give
a full investigation of the whole; I shall there-
fore only mention some of those diseases in
which it appears to me to act with the
most decidedly beneficial effects.



I am convinced that Calomel is a remedy
which has been as much abused, by empirics
and ignorant pretenders, as any other, but this
does not detract from its real utility, when in
the hands of one who knows its effects and its
applications. Take from the physician Calomel,
and you deprive him of one of the strongest
weapons, with which he is enabled to meet
and successfully combat disease. To turn it aside
and give enable him to go forth almost under
mayday, to contend with some of the most
obstinate forms of disease to which man is liable.
In fact may I not say that it is the sump-
on of the materia medica or the Bagnum du
donum (to main) when judiciously employed,
is a remedy in fever Calomel has long been
used, and its beneficial effects are well
known. Fever is a general disease of the system,
characterised, by dissemination generally, but always



by a morbid condition of the action of the
organs productive of the secretions, the skin is
dry, with partial or entire cessation of its
natural functions, diminished; Secretion of Urine,
parched mucous surfaces, as seen in the condi-
tion of the tongue, diminished glandular
action exemplified in the absence of Saliva;
and no doubt, the gastric juice, and mucous
secretions of the bowels, are in many cases
scanty. In some cases, the bile is not produced
in usual quantities; more commonly however,
a green and vitiated matter escapes in enormous
quantities from the liver, and forms a solitary
instance of increased action in the torpid system.
In fever we sometimes find derangement in
the muscular system, as shown by pains, and
general soreness, or an indisposition to action
and likewise, by the irregular and spasmodic
movements of the heart. The nervous system is

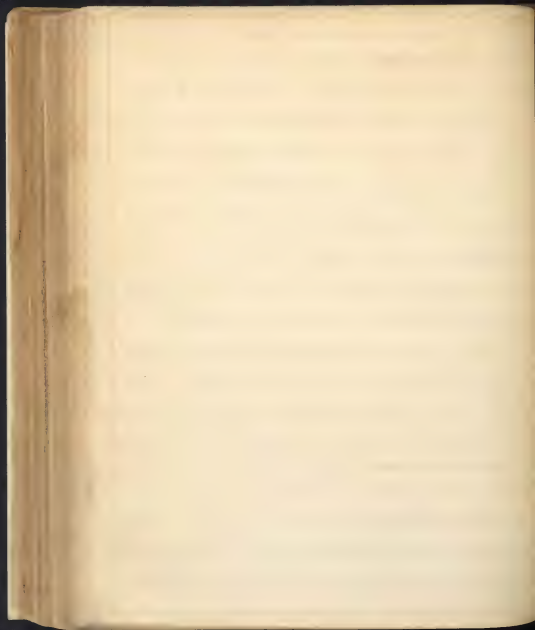


impaired, in energy, or is in increased but, very
slow actions. The sensations, are either dull or
painfully acute; either there is stupor or delirium
to some extent. These are some of the effects
of fever on the human system. If we could
at once point out the cause of this general
anarchy, we should not long be at a loss
for certain antidotes; but after all the disputes
on the subject may we not say that the Pathology
of fever is unknown, and we are left to
pursue the old mode of alleviating symptoms
or effects. There are increased or loosened secretions
nervous action, in the moving powers of the blood,
heat, pain, muscular strangement, and an
unnatural dullness, or sensitiveness, of the
nervous system. If we can alleviate all these
effects or symptoms, we may be very certain,
that we can either remove or render harmless
the unknown cause of all.



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Having these symptoms before us, we are to use
such remedies, as are best calculated, to restore
their healthy action to the various organs of the
system. We will now enquire, what are the
effects of Calomel on the system. The proof
that, when exhibited in doses of 10 or 15 grains,
it operates as a cathartic, and sometimes as an
emetic. When given in large or cathartic doses
it irritates the stomach, and its good effects
are confined to the intestines, and liver.

But when given in small, and frequently repea-
ted doses, it acts on every organ, and is capable
to sufficient extent, to produce slight ptyalism.
In many cases, underruns the other hemi-
cours of disease; and establishes its own peculiar
action on the system, which generally subsi-
ding leaves the body in a comparatively healthy
state. From what has been said of the effects
of Calomel, on the system and the symptoms



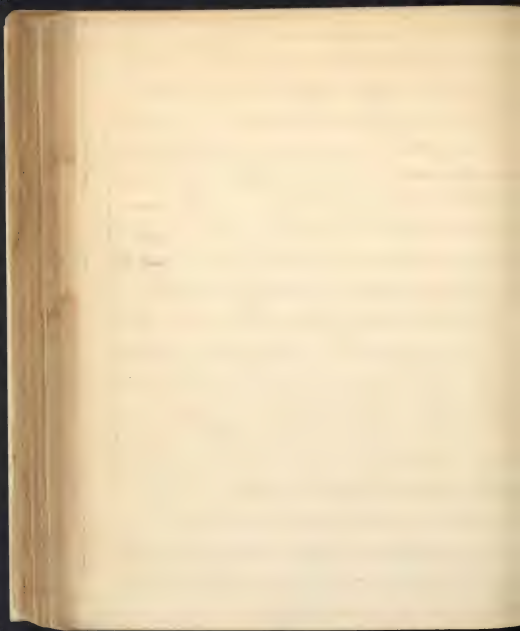
of fever 't will at once be seen that it is
one of the most powerful remedies in the
treat of this class of disease.

It may be combined with various other rem-
edies, as with Iodine to increase its cathartic
properties, with opium to allay irritation, and
with small portions of Tart. antimony with
a view of determining to the surface and
producing an attractive action in the capilla-
ries. In all fevers there is a diseased action in the
liver of itself, and from the pervading qualities
of calomel, ^{and the power which it possesses} when combined with certain, stu-
phorics, of acting on the same we may safely
recommend it as a valuable remedy in febrile
cases.

In the writings of Dr. Boerhaave on Syphilis
we find the following remarks: "Calomel
has a more general influence than any other
staphoric; it works a degree of nausea in the

Stomach, emulges the biliary ducts, dislodges
scybala most effectually, corrects morbid se-
cretions, and with small doses of antimonial
powder, or of the Sacchar. of antimony, promotes
inspiration as well as purges. Those who have
read the writings of Boerhaave and the disciples
of tropical climates will be no less to appreciate
the value of Calomel in the treatment of that
form of fever which prevails ⁱⁿ hot climates.

In intermittents, after the subsidence of an Paroxysm
we find no remedy, which acts so well in cleans-
ing the alimentary canal of that load of un-
healthy secretions with which, it is always more
or less burdened, and as the chylific ^{or} viscera
more or less deranged, in this disease, it becomes
a matter of great importance that a healthy
state of these viscera, should be brought about
by some means, and if we search the Materia
Medica through, we shall discover no remedy



is well calculated to accomplish our object
as balanced.

It is a fact, (I believe, admitted by all) that
we are acquainted with no remedy which acts
with more certainty, or energy on the liver or indeed
on the whole system. Professor Chapman when
speaking of mercury says "You suppose there
is no article of the material medica, so diffuse
in its effects, which pervading the whole
system, enters into every pore, and acting on
every part, leaves no member unpermeated
It prepares the system for the exhibition of the
last, which coming in after the bowels have
been thoroughly evacuated by calomel acts
with the best effects."

There is a form of this disease which has pre-
vailed for some years in the Southern States,
which calls for more energetic means than are
employed in ordinary cases. The patient is



suddenly attacked with the disease, and three or
four paroxysms put an end to his existence, unless
the most vigorous means be employed to overcome it.
The disease comes on with languor and lassitude
... excited, by a slight chill, which lasts only a
few minutes, when the most powerful reaction
takes place and in half an hour, the patient
is laboring under the most violent degree of
excitement, respiration laboured, skin hot and
dry, tongue parched, sick stomach, great thirst
and slight determination to the head. The pulse
in this disease is regular but somewhat irritated.
This stage lasts, probably, six or eight hours, after
which the sweating stage comes on, and the
patient is relieved of all those distressing symp-
toms, but still complains of full, languid sen-
sation, with a sense of heaviness in the right
Hypochondriac regions. On the succeeding day
the chill again returns accompanied with



an augmentation of all the above mentioned
symptoms. Thus it continues increasing in vio-
lence, until the system can no longer withstand
the ^{ravages of the} disease, and the patient sinks under the load
of oppression.

was proposed for the cure of this form of intermit-
tent, to be in the form of tea, and decou-
ments during the Pyrexia; and after the bowels
are evacuated the bark has been used during
the Pyrexia, but with no effect, and in the
intermission the bark has been used.

In form of treatment has been proposed. In the
intermission. During the Pyrexia, of cold
water in form of pills, except to a small
quantity of the bark has been used. In the
intermission, followed by a Saline Cathartic, if
it should be found necessary, and this plan of
treatment is to be pursued in the intermission
shows the course of a milder affection, when in

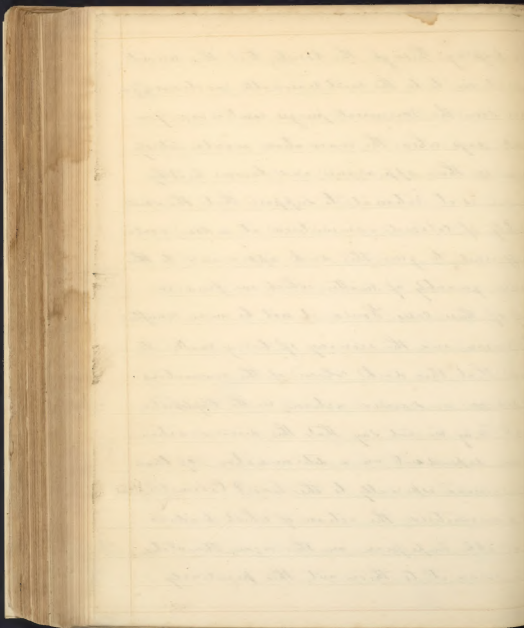


may resort to the use of the bath in combination
with Sulfuric acid with safety and great effect
as this, in my disease there is a want of the nat
ural function of the skin and instead of a dis
charge there is a deficiency of bile you may
keep your patient with the ordinary cathartic
Sulph. Elix. Senno is the most subtle and yet
bring from him nothing but the violent irritation
of the bowels. In this state of the system a
large dose of Calomel may be given for a small
dose seems at this time to be of little service, and you
must be the manager of the dose which appears to
have least torment under the operation of
every the cathartic and you have a copious
discharge of bile. This however is not natural
you know the subject it has the appearance and
consistence of Lard. I am aware that it is reported
by some that this appearance of the discharge is
dependent on the decomposition of the Calomel



while passing through the bowels, but this does not appear to me to be the most reasonable conclusion; for I have seen the mercurial purges continued for several days, when the evacuations would entirely change in their appearance, and become healthy.

Moreover, is it rational to suppose that the small quantity of calomel administered at a dose, would be sufficient to give this dark appearance to the immense quantity of matter, which we find in many of these cases? Would it not be more consistent with reason, and the economy of living matter to suppose that this dark colour of the evacuations depended on a diseased action, in the chylopoetic viscera? May we not say, that this diseased action is again dependent on a determination of blood to these viscera, especially to the Liver? Calomel being administered, the action of which produces a marcable impression on this organ, stimulates it and causes it to throw out, this peculiarly -



tion and unnatural secretion, its natural
function being suspended by the disease present.
I will admit that you may purge a man in
apparent good health with calomel, until you
produce this black discharge, but I contend
that by the action of your medicine you
first produce a derangement of the natural
function of the liver. And is not this too
often done by calomel?

Diagnosis

John H. W.

of the ...

